

What is claimed is:

1. An electronic device comprising an indicator, including:

a panel on which said indicator is mounted and an insertion hole provided through said panel,

5        said indicator comprising a light guide with one end surface exposed to a front surface side of said panel and another end surface projecting to a rear surface side of said panel, through said insertion hole, and a light emitting unit provided on the rear surface side of said panel such that a light emitting portion thereof is opposed to the other end surface of said light guide,  
10    and

      said light guide is composed of a light transmitting elastic body having a uniform cross section, and fixed by an outer peripheral surface thereof near the one end surface being in pressure contact with an inner peripheral surface of said insertion hole.

15        2. An electronic device according to claim 1, wherein:

      said insertion hole is formed by performing burring for said panel from the front surface side thereof to the rear surface side; and

      holding of said light guide in said panel is implemented by said insertion hole having a contact area increased by the performance of the  
20    burring.

      3. An electronic device according to claim 1 wherein

      the length of said light guide is set shorter than a distance from the front surface of said panel to a top portion of said light emitting unit by a clearance for preventing said light guide from abutting against said light  
25    emitting unit.

      4. An electronic device according to claim 1, wherein

      the end surface of said light guide on the front surface side of said

panel is a rough surface.

5. An electronic device according to claim 2, wherein the end surface of said light guide on the front surface side of said panel is a rough surface.

5 6. An electronic device according to claim 3, wherein the end surface of said light guide on the front surface side of said panel is a rough surface.

7. A method of mounting an indicator in an electronic device, comprising:

10 a first step of forming an insertion hole through a panel of the electronic device;

a second step of placing a light emitting unit at a position apart from the insertion hole on a rear surface side of the panel by a predetermined length such that a light emitting portion thereof is opposed to the insertion hole;

15 a third step of cutting a long light transmitting elastic body, which is formed to have a uniform shape of a cross section perpendicular to an axial direction thereof, in a predetermined length along a cross section perpendicular or oblique to the axial direction to form a light guide chip; and

20 a fourth step of pressing the light guide chip into the insertion hole from the front surface side of the panel,

wherein said steps are performed in any step order of (1) to (5):

(1) an order of said first, second, third, and fourth steps,

(2) an order of said first, third, second, and fourth steps,

(3) an order of said first, third, fourth, and second steps,

25 (4) an order of said third, first, second, and fourth steps, and

(5) an order of said third, first, fourth, and second steps.

8. A method of mounting an indicator in an electronic device according to claim 7, wherein:

at least one of the end surfaces of said light guide chip is formed into a rough surface in said third step; and

5        said light guide chip is pressed into said insertion hole such that the end surface formed into the rough surface is exposed to the front surface side of said panel in said fourth step.

9. A panel structure of an electronic device, wherein

an insertion hole is formed through a panel of the electronic device;

10        a light emitting unit is placed on a rear surface side of said panel at a position apart from said insertion hole by a predetermined length such that a light emitting portion thereof is opposed to said insertion hole;

15        a light guide composed of a light transmitting elastic body formed to have a uniform shape of a cross section perpendicular to an axial direction thereof, is inserted into said insertion hole from the front surface side of said panel and frictionally held by said insertion hole; and

said light guide is made by cutting a long light transmitting elastic body in a predetermined length along a cross section perpendicular or oblique to the axial direction into a chip form.

20        10. A panel structure of electronic device according to claim 9, wherein:

said insertion hole is formed by performing burring for said panel from the front surface side thereof to the rear surface side; and

25        holding of said light guide in said panel is implemented by said insertion hole having a contact area increased by the performance of the burring.

11. A panel structure of an electronic device according to claim 9,  
wherein

the length of said light guide is set shorter than a distance from the  
front surface of said panel to a top portion of said light emitting unit by a  
5 clearance for preventing said light guide from abutting against said light  
emitting unit.

12. A panel structure of electronic device according to claim 11,  
wherein

the clearance has a dimension which absorbs a cutting error occurring  
10 when the long light transmitting elastic body is cut in the predetermined  
length to be formed into said chip form.

13. A panel structure of electronic device according to claim 9,  
wherein

the end surface of said light guide on the front surface side of said  
15 panel is formed into a rough surface.

14. A panel structure of electronic device according to claim 10,  
wherein

the end surface of said light guide on the front surface side of said  
panel is formed into a rough surface.

20 15. A panel structure of electronic device according to claim 11,  
wherein

the end surface of said light guide on the front surface side of said  
panel is formed into a rough surface.

25 16. A panel structure of electronic device according to claim 12,  
wherein

the end surface of said light guide on the front surface side of said  
panel is formed into a rough surface.

17. A panel structure of electronic device according to claim 9,  
wherein:

said insertion hole is a hole formed of the inner wall of a cylindrical  
flange connected to said panel, and holds said light guide with said inner wall  
5 of the insertion hole.